

United States Environmental Protection Agency POSITION DESCRIPTION COVERSHEET		1. DUTY LOCATION Chicago, Illinois		2. POSITION NUMBER N3170XG <i>N 819-136</i>	
3. CLASSIFICATION ACTION: a. Reference of Series and Date of Standards Used to Classify this Position					
		b. Title <i>Interdisciplinary Environmental Engineer/Analyst</i>		c. Service GS	d. Series 819
Official Allocation				e. Grade 13	f. CLC 126
4. SUPERVISOR'S RECOMMENDATION		Environmental Engineer		GS	819 1201
5. ORGANIZATIONAL TITLE OF POSITION (if any)			6. NAME OF EMPLOYEE Rita M. Cestarc		
7. ORGANIZATION (give complete organizational breakdown)					
a. U. S. ENVIRONMENTAL PROTECTION AGENCY			e.		
b. Great Lakes National Program Office			f.		
c. Monitoring Indicators & Reporting Branch			g.		
d.			h. Organizational Code 90517808		
8. SUPERVISORY/MANAGERIAL DESIGNATION					
<input type="checkbox"/> [S] First or Second level supervisor: An individual who performs supervisory work and managerial responsibilities that require accomplishment of work through combined technical and administrative direction of others and meets the requirements for coverage as described in the General Schedule Supervisory Guide.					
<input type="checkbox"/> [A] An individual (as defined in Section 7103(a)(10) of Title V of the U.S. Code) who is authorized to hire, direct, assign, promote, reward, transfer, lay off, suspend, discipline, or remove one or more employees, or effectively recommend such action. The exercise of this responsibility is not routine or clerical in nature, but requires the consistent exercise of independent judgment.					
<input type="checkbox"/> [M] A manager who directs the work of an organization; is accountable for the success of line or staff programs; monitors, evaluates, and adjusts program activities; and performs the full range of duties outlined in the General Schedule Supervisory Guide. May also include deputies who fully share responsibility for managing the organization or who serve as an alter ego to the manager.					
<input type="checkbox"/> [B] A management official (as defined in Section 7103(a)(11) of Title V of the U.S. Code) who formulates, determines or influences an organization's policies. This means creating, establishing, or prescribing general principles, plans, or courses of action for an organization; or bringing about a course of action for the organization. Management officials must actively participate in shaping the organization's policies not just interpret laws and regulations give resource information or recommendations or serve as experts or highly trained professionals who implement or interpret the organization's policies and plans.					
<input type="checkbox"/> [T] "Team Leader" This position meets the requirements for coverage under Part II of the General Schedule Leader Grade Evaluation Guide.					
<input checked="" type="checkbox"/> [N] None of the above applies. This is a non-supervisory/non-managerial position.					
9. SUPERVISORY CERTIFICATION I certify that this is an accurate statement of the major duties and responsibilities of this position and its organizational relationships and that the position is necessary to carry out governmental functions for which I am responsible. The certification is made with the knowledge that this information is to be used for statutory purposes relating to appointment and payment of public funds, and that false or misleading statements may constitute violations of such statutes or their implementing regulations.					
a. Typed Name and Title of Immediate Supervisor Paul J. Horvatin, Chief, MIRB			d. Typed Name and Title of Second-Level Supervisor Gary V. Gulezian, Director, GLNPO		
b. Signature <i>Paul J. Horvatin</i>		c. Date 1/17/07		e. Signature <i>Gary V. Gulezian</i>	
				f. Date 1/17/07	
10. OFFICIAL CLASSIFICATION CERTIFICATION					
a. <input checked="" type="checkbox"/> This position has no promotion potential.		<input type="checkbox"/> If position develops as planned and employee progresses satisfactorily, this position has known promotion potential to grade:		b. Fair Labor Standards Act <input type="checkbox"/> Nonexempt <input checked="" type="checkbox"/> Exempt	
				c. Functional Code 99	
d. Bargaining Unit Code 0012		e. Check, if applicable: <input checked="" type="checkbox"/> Medical Monitoring Required <input checked="" type="checkbox"/> Extramural Resources Management Duties (___ % of time) <input type="checkbox"/> This position is subject to random drug testing ()		f. Signature <i>Paul J. Horvatin</i>	
				g. Date 1/29/07	
11. REMARKS STATEMENT OF DIFFERENCE:					



INSTRUCTIONS

I. ITEMS

- 1) **DUTY LOCATION:** Show the geographical location of the position, e.g., Washington D.C., New York, NY, etc.
- 2) **POSITION NUMBER:** To be completed by Human Resources Office.
- 3) **CLASSIFICATION ACTION:** To be completed by Human Resources Office.
- 4) **SUPERVISOR'S RECOMMENDATION:** Show the title service (GS, WG, etc) series and grade recommended by the supervisor.
- 5) **ORGANIZATIONAL TITLE:** Indicate the organizational title of the position if any, e.g., Division Director, Team Leader, etc.
- 6) **NAME:** Name of Employee. If vacant, indicate "vacancy."
- 7) **ORGANIZATION:** Show the organizational designation of the position starting with the first subdivision under the EPA. Indicate the official organizational code for the lowest approved organization.
- 8) **SUPERVISORY/MANAGERIAL DESIGNATION:** To be completed by immediate supervisor.
- 9) **SUPERVISORY CERTIFICATION:** To be certified by the first and second line supervisors who are delegated the responsibility for assigning and reviewing work. Reference appropriate delegations, manuals, and guidelines for limitations on signatory authority. Approval by second line supervisors is not required if the immediate supervisor is an Assistant Administrator, Regional Administrator or Laboratory Director. Signing the position description is an important responsibility; any intentional false or misleading statement in this description or willful misrepresentation thereto is a violation of the law punishable by a fine of not more than \$10,000 or imprisonment of not more than 5 years, or both. (18 U.S.C. 1001).
- 10) **OFFICIAL CLASSIFICATION CERTIFICATION:** To be completed by Human Resources Office.
- 11) **REMARKS:** To be completed by Human Resources Office.

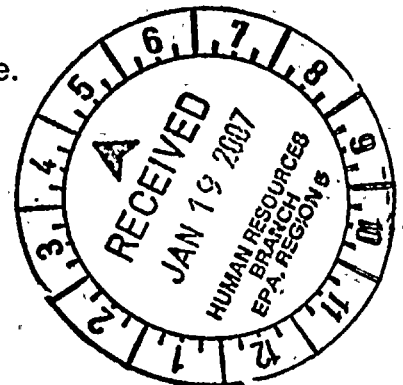
II. ADDITIONAL INSTRUCTIONS

Type the duties and responsibilities of this position on plain bond paper and attach to this form.

For specific instructions on how to complete this form, please contact your servicing Human Resources Office.

III. DISTRIBUTION

Original to official position description file in the Human Resources Office.
Copy to Official Personnel Folder (OPF)
Copy to Employee



POSITION DESCRIPTION

Environmental Engineer, GS-0819-13 / ENVIRONMENTAL SCIENTIST GS-1301-13

Position Number: Environmental Engineer GS 13 / ENVIRONMENTAL SCIENTIST GS-1301-13

Organizational Code:

ENVIRONMENTAL SCIENTIST

Organizational Location: The incumbent serves as an environmental engineer/on the Monitoring, Indicators, and Reporting Branch (MIRB) staff of the Great Lakes National Program Office (GLNPO). GLNPO is responsible for ensuring the fulfillment of the US obligations under the Great Lakes Water Quality Agreement with Canada. The office has responsibility for developing and coordinating policies and implementing programs relating to the management of the Great Lakes ecosystem. GLNPO provides leadership, assistance and coordination on Great Lakes issues for the activities of Great Lakes States and Provinces, various US agencies and the US Environmental Protection Agency in the areas of ambient monitoring, long-term planning, and remedial programs for the control of pollution in the Great Lakes system, including demonstrations of technologies.

Primary Purpose: The assignment pertains to the planning and implementation of monitoring programs to determine the magnitude and extent of toxic contamination in the Great Lakes, interpretation of the data acquired from these monitoring programs, drafting of lake and air quality status reports, and formulation of plans to address the problems identified in the status reports. The reports include assessment of the nature and extent of environmental problems within the area, as well as the effects on the Great Lakes Basin. These status reports and plans will help provide a focus for US environmental control activities.

This position is that of an environmental engineer/ENVIRONMENTAL SCIENTIST. The incumbent applies a professional knowledge of environmental engineering, basic chemistry, analytical methods, statistics and related scientific and technical disciplines to the planning and interpretation of sampling projects and to reviews of regulatory actions and management of toxic contaminants. The engineer/SCIENTIST will provide technical support to GLNPO's Chief of the MIRB.

Duties:

- 1) Compile, tabulate, and evaluate data which characterizes the physical-chemical properties of the Great Lakes ecosystem, as well as the type, degree, and effects of contamination by organic and inorganic toxins in the sediments, water, air, and biota of the Great Lakes including remediation and management options for correcting such contamination.
- 2) Draft administrative and technical reports, and prepare scientific publications.
- 3) Serves: *Engineer/Scientist*
or lead chemist on research vessels or field teams engaged in monitoring the Great Lakes ecosystem *from*
- 4) Plan and conduct surveys to determine physical-chemical properties and identify the types and

technical analyses, studies, sampling, or other forms of data processed by others, within or outside EPA, for technical adequacy and acceptability.

Disseminates scientific/technical information through oral briefings, written documents, workshop/conference/seminar presentations, and/or public hearings to provide information on significant analytical methods, sampling techniques, etc., related to a specific program, function, or activity. Reviews and evaluates data submittals and/or requests involving a specific scientific and/or engineering activity/ discipline/function (e.g., air pollution modeling, risk assessments, environmental impact statements, etc.). Advises appropriate personnel as to the adequacy/accuracy of data/processes and/or the appropriateness of the request, and provides technical assistance where applicable. Plans, coordinates, reviews and/or evaluates a broad scope of studies/ investigations and complex problems related to scientific assessments and scientific risk determinations.

Provides technical support in the areas of environmental impact analysis and development of approaches for environmental assessments for a variety of environments. Plans, coordinates, reviews and/or evaluates a broad scope of studies/ investigations of complex problems related to scientific assessments and scientific risk determinations. Provides technical support in the areas of environmental impact analysis and development of approaches for environmental assessments for a variety of environments. Assists and advises regional personnel, state and local officials private industry, and the general public regarding the interpretation of EPA's regulatory and policy requirements with respect to specific activities within scientific/technical disciplines.

Disseminates scientific/ technical information through oral briefings, written documents, workshop, conference, and seminar presentations, and/or public hearings to provide information on significant analytical methods, sampling techniques, etc., related to a specific program, function, or activity. Reviews, interprets, and evaluates analytical data to determine validity, data quality, and scientific significance for intended use. Identifies analytical discrepancies and develops recommendations concerning precision and accuracy of analytical results, and whether or not data is valid and acceptable for intended purpose. Verification of results includes confirming identification of the components and concentration levels. Insures all appropriate agency protocols, methodologies, and quality assurance requirements are met. Assists and advises regional personnel, state and local officials, private industry, and the general public regarding scientific/technical data and/or activities, and the relevance of such data/activities to specific areas of responsibility (e.g., risk assessment, modeling, environmental monitoring of specific facilities/activities, etc.)

Disseminates scientific/technical information through oral briefings, written documents, workshop/conference/seminar presentations, and/or public hearings to provide information on significant analytical methods, sampling techniques, etc. related to a specific program, function, or activity. Reviews and evaluates data submittals and/or requests involving a specific scientific and/or engineering activity/ discipline/function (e.g., air-pollution modeling, risk assessments, environmental impact statements, etc.). Advises appropriate personnel as to the adequacy/accuracy of data/processes and/or the appropriateness of the request, and provides technical assistance where applicable. Plans, conducts, and/or provides technical expertise to

coordinates preparation of comments on environmental impact statements.

Serves as a technical specialist involved in significantly complex environmental programs that include a variety of controversial characteristics such as conflicting environmental, cultural, and/or political factors. Reviews, analyzes, and recommends modifications of plans and/or programs developed by state, local and/or tribal government entities to implement various provisions of federal environmental standards. Develops and analyzes data and prepares reports relating to the responsiveness of implementation plans for state, local and/or tribal environmental protection programs. Reviews, analyzes, and coordinates preparation of comments on complex environmental impact statements. Serves as a technical authority in providing expert advice and assistance to state, local and/or tribal governments on matters relating to the development, execution and monitoring of the most complex and politically sensitive environmental protection policies, plans, and programs.

Develops and/or analyzes proposals for new or revised environmental protection regulations and determines their impact on air, water, and/or land resources. Responds to inquiries from congressional representatives and the general public concerning the interpretation and application of new plans and policies designed to meet program objectives.

Analyzes scientific and technical environmental issues and/or performs work involving the review and implementation of environmental standards and regulations.

Scientific and Technical Analysis 50%

Uses analytical methods and techniques to analyze a wide range of scientific, engineering, legal, environmental protection, and/or environmental management issues. Using standard analyses and field studies, provides technical assistance regarding data review, quality assurance, sampling and sample preservation techniques, or analytical methodologies to Regional staff, state and local agencies, private industry, and the general public. Prepares reports defining results of analyses, stating results and making recommendations as appropriate.

Plans, coordinates, and conducts field sampling, facility inspections/audits or studies using a variety of standard methods, procedures, and techniques. Conducts field studies with inconsistent alternatives. Provides technical assistance regarding data review, quality assurance, sampling and sample preservation techniques, or analytical methodologies to regional staff, state and local agencies, private industry, and the general public. Conducts analyses and interpretation of data relating to environmental problems/issues/studies, and provides technical testimony as required in legal proceedings. Reviews, evaluates, and assures the quality of the data. Prepares reports, memoranda, and letters to transmit data.

Conducts and/or provides technical expertise to field teams in all areas of sample collection/resource monitoring/facility inspections or audits, including equipment, methodology, documentation, and quality assurance. Coordinates the logistical and administrative tasks needed to complete studies, investigations, inspections or audits of federal, state, local, and industrial/commercial facilities. Evaluates and interprets pertinent data and provides recommendations as needed. Performs quality control functions by reviewing and evaluating

complex, often multi-media field sampling and analytical services, facility inspections or audits, and/or monitoring support for highly complex scientific programs/activities. Provides assistance on administrative and technological aspects of study/inspection/audit.

Advises regional management and/or state or interstate authorities on the status of scientific/engineering developments and the degree to which their involvement is needed to ensure that vital regional or state interests are considered in related agency guidance and policies. Provides expert and highly specialized technical assistance, models, or interpretations of data on matters related to a specific scientific/engineering method/approach/function/process. Develops plans, reviews data, conducts tests, researches environmental data, develops models, and/or provides information regarding the analysis and evaluation, with recommendations for the solution of problems/issues. Develops regional policy, as required, to address environmental problems/issues/processes. Develops and implements plans, and agency-specific policies to carry out technical solutions to significant environmental problems. Provides comprehensive and authoritative assistance to senior management in the negotiation of such plans and the resolution of very sensitive policy, legal, and technical issues. Makes formal presentations of a technical and policy nature before EPA headquarters, other federal, state, and local agency officials, private industry, and public and private groups. Disseminates scientific/technical information through oral briefings, written documents, workshop/conference/seminar presentations, and/or public hearings to provide information on significant technical and/or policy issues on a specific program, function, or activity. Develops technical/scientific training course(s) and/or course materials, and presents training in specific area of expertise.

Performs program administration work, such as contract or grant management, or environmental liaison work, in order to accomplish the assigned environmental management and protection duties.

Performs work related to the initiation, administration, and/or close-out of contracts grants, cooperative agreements, and/or interagency agreements (IAGs).

Grants/Cooperative Agreements/Interagency Agreements 15%

Exercises management responsibilities for grant, cooperative agreement, and/or interagency agreement activities related to the initiation, administration, and/or close-out of grants, cooperative agreements, and/or interagency agreements (IAGs), including responsibility for monitoring performance. Provides assistance to more senior staff members in the negotiation, implementation, and/or ongoing management of one or more grants/cooperative agreements/IAGs. Provides technical assistance to applicants/recipients regarding well-established grants assistance programs. Exercises technical responsibility for grants/cooperative agreements/IAGs within stable, well-established programs, or shares technical responsibility for the more complex grants/agreements/IAGs. Performs the full range of activities for grants/cooperative agreements/IAGs that involve significant special provisions. Works with parties outside the agency to resolve problems; recommends approval of modifications or extensions. Manages a variety of highly complex and typically long-term grants/cooperative agreements/IAGs, entailing the coordination of efforts and the resolution of conflicting and controversial high profile issues with a number of parties both within and outside

the agency. Exercises definitive technical authority regarding audit issues and disputes. Analyzes and revises grant related regulations and policies.

Develops, initiates, implements, and maintains environmental education programs.

Environmental Data Analysis 10%

Performs work related to the conduct of studies of diverse environmental issues and the tracking and monitoring of results. Gathers and verifies data from a variety of sources, which may include data generated and submitted by state agencies. Prepares information received for input to computer system. When necessary, contacts data sources to clarify reporting requirements. Compiles, analyzes, and reports statistics to determine program status and accomplishments. Provides reports including supporting charts and graphs, to depict program status for agency management and in response to FOIA requests. Conducts studies of diverse issues. Records and reviews documents received from various sources. Interprets, codes, and inputs data into information management data systems. Utilizes data to prepare reports detailing program status. Evaluates data for comparison with program commitments or compliance standards and makes recommendations to supervisor based on conclusions drawn from review and evaluation. Provides reports for agency management and in response to FOIA requests. Plans/coordinates detailed evaluations. Plans, develops, implements, and monitors tracking systems. Compiles, analyzes, and reports statistics to determine program status and accomplishments, including identifying deficiency situations and developing policy recommendations to management. Analyzes proposed action alternatives and makes recommendations as to the feasibility of the various options. Provides training regarding the program's information management system. Functions as principal contact for all aspects of database management relating to administration of the program's information management system. Manages complex database and data support systems for reporting activity relating to a regulatory program. Advises agency personnel and the public on interpretation and use of data. Provides assistance in the collection and analysis of data; develops formats to meet special needs; and trains staff in system design and operation. Performs evaluative analysis on system capabilities and assists in development of requirements for proposed system enhancements. Provides authoritative interpretation of the provisions of the program's database requirements and procedures; identifies and addresses ambiguities in the system; and develops flexible formats to meet specialized information needs for states and/or agency management. Serves as focal point for training leadership for provision of training regarding the program's information management system. Develops long-range evaluation techniques for conflicting, unclear issues. Reviews and analyzes data collection procedures and assists in negotiations of appropriate changes to ensure compatibility with reporting requirements. Formulates and directs the development and implementation of long-range analytical and managerial studies which guide difficult policy and managerial decisions in the design and implementation of information dissemination. Formulates and directs the development and implementation of long-range analytical and managerial studies which guide difficult policy and managerial decisions in the design and implementation of information dissemination. Utilizes analytical techniques which may be controversial or unconventional to conduct studies, evaluate results, and provide impact analyses of available strategies.

Factor 1-8 1550 Points

Knowledge Required by the Position

Mastery of specialty areas in environmental engineering/sufficient to apply new developments and theories to critical and novel problems; extend and modify approaches, precedents, and methods to solve a variety of scientific technical problems with unprecedented aspects; and make decisions or recommendations that significantly affect the content, interpretation, or development of major policies or programs concerning critical or major scientific technical issues. The position requires a mastery of applicable environmental statutes and regulations.

Factor 2-4 450 Points

Supervisory Controls

The supervisor establishes overall objectives and resources available. The supervisor and engineer/scientist jointly develop projects, priorities and deadlines. The engineer/scientist independently plans and carries out assignments, interprets policy, coordinates work with others, resolves most of the conflicts that arise, and keeps the supervisor informed of far-reaching implications. Completed work is reviewed from an overall standpoint in terms of feasibility, and effectiveness in meeting requirements.

Factor 3-4 450 Points

Guidelines

Technical, regulatory, and policy guidelines are often broad and nonspecific. The engineer/scientist is required to use resourcefulness and perception based on experienced judgment, to adapt or interpret general guidelines; to deviate from or extend traditional practices, methods, and techniques; or to resolve situations where precedents are not available or not applicable.

Factor 4-5 325 Points

Complexity

Assignments are of such breadth, diversity, and intensity that they involve many varied and complex features, and typically contain a combination of complex features that involve serious or difficult to resolve conflicts between engineering and management requirements. The work requires originating innovative engineering techniques, establishing criteria and standards applicable to wide range of engineering problems and conditions, or developing new scientific concepts or approaches that advance the state-of-the-science.

Factor 5-5 325 Points

Scope and Effect

The work includes the resolution of a broad range of critical or highly unusual engineering/science problems, development of innovative approaches or guides, or the determination of the effectiveness and validity of proposed or current policies and programs. The engineer/scientist serves as an expert advisor and consultant to officials and managers within or outside the agency on a broad range of engineering/science activities and broad policy issues.

Factor 6-3 60 Points
Personal Contacts

Personal contacts include a wide range of professional and administrative personnel throughout the agency, at other federal agencies, in state and local government, private industry, academia, environmental advocacy groups, and in some cases the media and elected officials.

Factor 7-3 120 Points
Purpose of Contacts

The purpose of contacts is to influence or negotiate with others who may be skeptical or uncooperative or whose interests differ from those of the program represented. Issues to be resolved are sensitive or controversial. Contacts are also undertaken to plan, coordinate, or advise on work efforts or resolve operating problems in dealings with others who are working toward mutual goals.

Factor 8-1 5 Points
Physical Demands

The work is primarily sedentary, although some physical effort may be required, e.g., walking, standing, carrying light items such as manuals or briefcases, or driving or traveling by motor vehicle.

Factor 9-1 5 Points
Work Environment

The work environment involves everyday risks or discomforts that require normal safety precautions typical of such places as offices, training rooms, and libraries. The work area is adequately lighted, heated, and ventilated. There may be occasional exposure to moderate risks or discomforts while conducting field work on-board the Research Vessel Lake Guardian or other such vessels.

Other Significant Facts:

The Sensitivity Level of the position is Non-Sensitive.

This position is subject to medical monitoring.

The position requires that appropriate preventive measures be taken to avoid possible exposure to hazardous substances.

Alternative work schedules are available for this position.

Performance of some or all of the duties of this position at an alternate duty station under a Flexiplace Program may be available.

Serves as a staff or team member on project, program, or task force teams, contributing environmental and/or scientific analyses and recommendations to resolve assigned environment issues, activities, and/or problems.

Serves as a Work Assignment Manager (WAM) who monitors a specific portion of work under a contract for cost-reimbursable, level-of-effort contracts. The WAM is designated in the work assignment and works under the direction and control of a Project Officer.

Defines and prepares the scope of work for work assignments issued against the contract. Ensures that the proposed scope of work for the work assignment is within the general scope of work for the overall contract. Obtains the proper funding commitments to fund the work assignment. Develops the government's work estimate identifying the level of effort required to complete the work assignment as necessary. Determines the appropriate appropriation/accounting data applicable to the work assignment to aid the Finance Office in properly disbursing funds. Ensures that the use of multiple appropriations is in compliance with the Agency's policy. Calculates the number of work years needed, the proper labor mix, the project schedule and/or milestones, reporting requirements, travel, any government property or equipment, and any other information which the Contracting Officer or contractor properly needs to understand the work requirement being issued.

Reviews and recommends approval/disapproval of the work plans issued by the contractor describing the approach necessary to implement the tasks in the work assignment. Recommends approval/disapproval of any aspect of the proposed work assignment budget except for the costs already established by the contract (fringe, overhead rates, G&A, and fee). Ensures that any consultants or subcontractors identified in the work plan have been properly authorized by the Contracting Officer to perform work on the contract.

Monitors and oversees the performance of the work assignment. Provides the necessary government technical direction to the contractor. Reviews all vouchers submitted by the contractor for payment against the appropriate work assignment and recommends approval or disapproval through the project officer. Reviews all progress reports submitted by the contractor in order to properly monitor and control costs as well as ensure contractor performance and use of proposed personnel. Identifies and reports any subcontractor, cost, performance, or conflict of interest problems to the Project Officer. Reviews and recommends approval or disapproval of all deliverable products submitted by the contractor under the work assignment. Submits a final report to the Project Officer on overall contractor performance, a summary of costs incurred, and a summary of the tasks performed.

The work site is a smoke-free environment.

The incumbent is required to annually file a financial disclosure statement.

Linguistic proficiency in the following language(s) is required.

Proficiency in English required.